



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,126	12/26/2001	Mark Leiental	83727D-W	3342
7590	03/16/2004		EXAMINER	
Paul A. Leipold Patent Legal Staff Eastman Kodak Company 343 State Street Rochester, NY 14650-2201			VIJAYAKUMAR, KALLAMBELLA M	
			ART UNIT	PAPER NUMBER
			1751	
DATE MAILED: 03/16/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/036,126	Applicant(s) LELENTAL ET AL.	
	Examiner Kallambella Vijayakumar	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed 12/26/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-19 is/are rejected.
- 7) ☐ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1+2</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

- Acknowledge the preliminary amendment filed 03/14/2002 amending the specification and claim-5. Also, acknowledge a complete listing of all the pending claims filed 10/14/2003. Claims 1-19 are currently pending with the application.
- The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A (1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the examiner on form PTO-892 has cited the references and/or the applicants have provides them on PTO-1449, they have not been considered.

Objections to Specification

- The specification is objected to for the following reasons: The use of the trademark "**Baytron P**" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Claim Objections

- Claim 6 is objected to because of the following informalities: Improperly there are TWO Amended Claims-6 with different limitations in the complete listing of claims currently filed 10/14/2003, and the claim 6 has not been further treated on the merits. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 14 and 15, the phrase "other hydrophilic cellulose derivatives" and "other hydrophilic synthetic resins" respectively, renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "other hydrophilic cellulose derivatives" and "other hydrophilic synthetic resins"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). The claims or the specification does not provide guidance in what materials are included and what are excluded by these limitations, and public will not be appeased about the boundaries of these limitations without undue burden of experimentation.

Claim Rejections - 35 USC § 102

Claim Rejections - 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1, 4, 6-8, 11, 13, 15, 17-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wessling (WO99/05687).

Wessling discloses coating compositions comprising aqueous/organic dispersions of conductive polymers such as polyaniline and polythiophene, binders such as polyvinyl

alcohol in a solvent mixture of n-methyl-pyrrolidone (NMP) and isopropanol (Page-6, Line-31 to page-7, Line 24). Wessling further discloses the use of conductive particles of polyanilines as components in antistatic coating compositions (Page-13, Lines: 8-10). NMP meets the limitation of the conductivity enhancer in the claims. The values of conductivity for polyaniline particles given by Wessling (Page 15, Line- 56 to Page-16, Line 2) would meet the limitations of instant claim-17. The limitation of particle in claims 18-19 would be anticipated for the dispersion coating compositions. All the limitations of the instant claims are met. All the above-mentioned pertinent information could be further referred to in US Patent #6,6323,380 (Col-3, Lines: 47-67; Col-7, Lines: 15-17; Col-8, Lines: 42-56) that has not been used in the present rejection.

The reference is anticipatory.

In the alternative that the disclosure by Wessling et al be insufficient to arrive at the limitations of the instant claims by the applicants, it would have been obvious to one of ordinary skill to make modifications to the composition, choose fine particles of the polymer by choice of design and/or apply the coatings as antistatic coating with the expectation of reasonable success in arriving at the limitations of instant claims by the applicants, because Wessling teaches the variations in the composition forming coatings/paints and their benefits and using the compositions antistatic coatings.

2. Claims 1-5, 7-8, 10-11, 13, 15, 17-19 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cloots et al (EP 003179).

Cloots et al disclose conductive coating compositions comprising of an aqueous dispersion of polythiophene, co(vinylidenechloride/methacrylate/itaconic acid), methyl pyrrolidone, and a surfactant that would meet the limitations of instant claims 1, 4-8, 10-11, 13 and 15 (Sections: 0027-0030, Table-1). The limitations of conductivity in claim-17 and the particle size for the conductive particles in claims 18-19 would be inherent. The use of dispersion as conductive/anti-static coating would be anticipated. All the limitations of the instant claims are met.

The reference is anticipatory.

In the alternative that the disclosure by Cloots et al be insufficient to arrive at the limitations of the instant claims by the applicants, it would have been obvious to one of ordinary skill to make modifications to the composition, choose fine particles of the polymer by choice of design that is well known in the art (NOT used in making the rejection: Kulakarni, US Patent# 6,099,757, Col-10, Lines: 35-38) and/or apply the coatings as antistatic coating with the expectation of reasonable success in arriving at the limitations of instant claims by the applicants, because Cloot teaches the variations in the composition and their benefits in formulating antistatic coatings for photographic films.

3. Claims 1-5, 7-13, 15, 17-19 rejected under 35 U.S.C. 102(b) as anticipated by Muys et al (US Patent 5,391,472).

Muys et al disclose transparent-antistatic coating compositions comprising of (i) polythiophene/polyanion dispersion wherein polyanion compound being polyacrylic acid or polystyrene sulfonic acid (Col-3, Lin-60 to Col-6, Line-11) and (ii) a latex polymer having

hydrophilic functionality such as copolymer of vinylidene fluoride and unsaturated carboxylic acid (Col-6, Lines: 55-6; Col-7, lines: 6-10). The antistatic coating composition further comprises addition of various additives such as phenolic compounds, aliphatic polyhydroxy compounds such as glycerol and sorbitol, monomeric carboxylic acids such as furancarboxylic acid. (Col-7, Lines: 29-53) and hydrophilic colloidal binder of polyvinyl alcohol (Col-9, Lines: 5-14). The coating compositions given in Table-1 (Col-12) and composition of latex-D (Col-13, Line- 62- Col-14, Line-20) meet the limitations of the instant claims including the ratio limitations in claims 2-3. The limitations of conductivity in claim-17 and the particle size for the conductive particles in claims 18-19 would be inherent.

All the limitations of the instant claims are met.

The reference is anticipatory.

4. Claims 1-5, 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Muys et al (US Patent 5,391,472) or Cloots et al (EP 003179) in view of Gardner et al (US Patent 5,910,385).

The disclosure on the antistatic coating composition by Muys et al is set forth as under Rejection-3 and by Cloots et al is set forth as under Rejection-2.

Although, Muys et al make use of NMP, glycerol, sorbitol and polysaccharides in the coating composition that are neutral-charge conductivity enhancers claimed by the applicants in the instant claims, and Cloots teach the use of NMP and Polythiophene with polystyrene anion in the respective coating compositions, both do not teach or fairly suggestive of other neutral-charge conductivity enhancers such as ethylene glycol and/or the other binders such

as gelatin and cellulose compounds in their coating formulations, although these have been widely used for forming antistatic layers in the photographic applications.

Gardner et al teach making electrically conductive compositions comprising dispersion of polyaniline-protonic counter-ion complex with an electrical conductivity of 1×10^4 ohm-cm in a first solvent and a second solvent and a binder (Abstract, Col-2, Lines: 52-63; Col-12, lines: 5-8). First solvent included DMSO, NMP and various alcohol blended solvents; the second solvent was different than the first and included chlorinated solvents, alcohols and glycol ethers; and the binders included methyl methacrylate, gelatin and cellulose esters (Col-14, Lines: 42-55; Col-15, Lines: 10-59).

It would have been obvious to one of ordinary skilled in the art to modify the coating composition of either Muys or Cloots by choosing other binders such as cellulose esters or gelatin and/or other solvents such as glycolic ethers that function as neutral-charge conductivity enhancers per the teachings of Gardner by choice of design, because Gardner teaches the benefits of such modifications in the compositions of antistatic/conductive coatings, further, all the teachings are in the analogous art of conductive/antistatic compositions, and with the expectation of reasonable success in arriving at the limitations of the instant claims by the applicants.

Conclusion

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kallambella Vijayakumar whose telephone number is 571-272-1324. The examiner can normally be reached on M-Th, 07.00 - 16.30 hrs, Alt. Fri: 07.00-15.30 hrs.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMV
02/25/2004


Mark Kopec
Primary Examiner